

2019

TESTING THE MEDIATING ROLE OF COLLECTIVE EFFICACY PERCEPTIONS ON THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTIONS OF PROFESSIONAL BURNOUT AND ORGANIZATIONAL COMMITMENT

Mevlüt AYDOĞMUŞ

Necmettin Erbakan University, Konya, maydogmus@erbakan.edu.tr

Yalçın TÜKEL

Konya Provincial Directorate of Family and Social Policies, ytukel7@gmail.com

Follow this and additional works at: <https://digitalcommons.nl.edu/ie>

Recommended Citation

AYDOĞMUŞ, Mevlüt and TÜKEL, Yalçın. (2019). TESTING THE MEDIATING ROLE OF COLLECTIVE EFFICACY PERCEPTIONS ON THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTIONS OF PROFESSIONAL BURNOUT AND ORGANIZATIONAL COMMITMENT. *i.e.: inquiry in education: Vol. 11: Iss. 2, Article 2.*

Retrieved from: <https://digitalcommons.nl.edu/ie/vol11/iss2/2>

Copyright © 2019 by the author(s)

i.e.: inquiry in education is published by the Center for Practitioner Research at the National College of Education, National-Louis University, Chicago, IL.

Testing the Mediating Role of Collective Efficacy Perceptions on the Relationship Between Teachers' Perceptions of Professional Burnout and Organizational Commitment

Mevlüt Aydoğmuş

Necmettin Erbakan University, Konya, Turkey

Yalçın Tükel

Necmettin Erbakan University, Konya, Turkey

Introduction

Teachers, one of the basic vital human resources of the education system, play an important role in comprehensive restructuring actions carried out in education, as well as in developing schools, increasing the quality of education, and forming an effective school culture and climate. Therefore, determining the variables that affect the qualifications, orientations, performances, motivations, and attitudes of teachers in processes related to teaching is considered important (Erdoğan and Dönmez, 2015). The increase in people's roles and responsibilities and the complexity of their relationships become challenging for mental health, and interpersonal relations have an important place in the life of individuals working directly with people. Education is one of the areas where interaction with people is the most intense. The situation leads to intense burnout (Dericioğulları, Konak, Arslan, and Öztürk, 2007). The concept of burnout, one of the problems of the modern age, first appears in the novel *A Burnt-Out Case* by Graham Greene, which was published in 1961. It depicts a psychologically collapsed architect who quits his job and his escapes to the African forests. In it, the architect loses his idealism as a result of his feelings of exhaustion and anger about his work (Yıldırım and İçerli, 2010). Edelwich (1980) defines burnout as progressive loss of idealism, energy, and purpose experienced by people in the service sector as a result of the conditions of their work (as cited in Cemaloğlu and Şahin, 2007). In an effort to define burnout, Maslach et al. (1986), proposed three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment.

Research Purpose and Hypotheses

The purpose of this study is to investigate the mediating role of perceptions of collective efficacy in the relationship between teachers' professional burnout and organizational commitment.

Significance of Research

In this study, we investigated the factors that affect the relationship between teachers' perceptions of burnout and their organizational commitment. We tested whether the perception of collective efficacy has a mediating role in this relationship. We chose collective efficacy because it is an important issue for teachers.

Hypothesis

- 1- Teachers' perception of professional burnout negatively affects their perception of collective efficacy.
- 2- Teachers' perception of professional burnout negatively affects their organizational commitment.
- 3- Perceptions of collective efficacy play an important role in the relationship between teachers' perception of professional burnout and their organizational commitment.

Literature Review

Emotional Exhaustion: Emotional exhaustion refers to feeling emotionally worn-out and drained by one's work. It emerges as a lack of energy and the feeling that one's emotional resources are depleted, and it makes people feel not as efficient and responsible as they used to be. This dimension of burnout is characterized by feeling depleted of one's emotional and physical resources (Maslach and Goldberg, 1998).

Depersonalization: Depersonalization, characterized as the interpersonal dimension of burnout, refers to negative attitudes towards clients and callous responses toward work and various aspects of the job. It is described as stoic, cold, and indifferent behaviours displayed by an employee (Togia, Koustelios, and Tsigilis, 2004).

Reduced Personal Accomplishment: The feeling of reduced personal accomplishment refers to a decline in one's feelings of competence and achievement in one's work and thus one starts to feel incompetent in events related to work and in interpersonal relationships at work. Thus, the effort is wasted and the feeling of guilt prevents the employee from fulfilling the necessary actions for success by decreasing work motivation (Özkaya, 2006). According to the study by Wang (2017), there was a negative and significant relationship between teachers' burnout and the satisfaction with personal education, earnings of the teaching profession, interpersonal relationships in the school, school policies, and career development. According to Wang, all these affective traits related to occupation directly and indirectly affect teachers' commitment to school.

In this respect, it is noteworthy to mention that another important concept affecting the quality of life of service-sector employees is organizational commitment. The sense of employees' organizational commitment leads to important outcomes in favor of both the employee and the organization. Therefore, employees' organizational commitment is a necessary condition for the organization to offer effectiveness, efficiency, and high-quality products (Koç, 2009). Organizational commitment refers to psychological commitment to elements such as individuals' involvement in the organization, loyalty, and belief in organizational values. Organizational commitment means a full commitment to one's occupation. The concept of commitment to occupation includes appropriate use of time, attention to details, making an extra effort, acceptance of change, cooperation with others, self-improvement, respect for trust, being proud of his/her abilities, trying to do better, being

open to development, and providing support to the organization faithfully, among others (Güney, 2001).

Allen and Meyer (1990, p. 1) state that organizational commitment consists of three components: affective, continuance, and normative. *Affective commitment* refers to an employee's emotional attachment to, identification with, and involvement in the organization. *Continuance commitment* refers to commitments based on the costs that employees associate with leaving the organization. Finally, *normative commitment* refers to an employee's feelings of obligation to remain in the organization. Organizational commitment has positive aspects for employees, work groups, and organizations. However, organizational commitment may possibly have negative aspects. Nonetheless, it is an indisputable fact that the positive aspects are far above the negative aspects and therefore, efforts should be made to strengthen the organizational commitment (Bakan, 2011, p. 45). Organizational commitment, which is shown to be the most important factor in the achievement of organizational success, makes individuals into problem solvers instead of problem producers. Therefore, efforts are made to increase the commitment of each individual within the organization. If organizations want to reach a state of comfort and survive, it is necessary to strengthen the commitment of employees (İnce and Gül, 2005, as cited in Uğraşoğlu and Çağanağa, 2017). In recent years, because of the importance of the subject, there have been many studies on teachers' organizational commitment. These studies have investigated topics such as the relationship between organizational commitment and different variables (Gören and Yengin, 2014), the relationship between organizational commitment and organizational culture (Sezgin, 2010), the relationship between organizational trust and organizational commitment (Eğriboyun, 2014), the relationship between the ways teachers deal with stress and levels of organizational commitment (İhtiyaroğlu, 2018), teachers' views on organizational commitment (Bakır, 2013), teachers' level of organizational commitment (Özgan, Yiğit, and Cinoğlu, 2011), and school administrators' levels of organizational commitment (Nayır, 2013; Akar, 2014). Moreover, Üstüner (2009) developed a scale to measure teachers' organizational commitment. However, in order to better understand teachers' organizational commitment and to present sufficient inferences in terms of implementation, this concept should be investigated by associating with different organizational and personal characteristics.

One of these personal characteristics is professional burnout. Various studies have been conducted to reveal the relationship between professional burnout and organizational commitment. Burnout, which is frequently experienced in occupations which require intense face-to-face relationships with people, has a negative impact on employees' adoption of the organization and inhibits the strengthening of their feelings of commitment to the organization, which could otherwise increase employees' performance and productivity levels. Employees experiencing burnout cannot show commitment to the organization and their sense of burnout suppresses the sense of commitment (Demirel, Tohum, and Kartal, 2017).

In this study collective efficacy is one of the most important concepts that affect the service performance of service-sector employees. The concept of collective efficacy is one of the most important concepts of Bandura's Social Cognitive Motivation Theory and it is an extension of the concept of self-efficacy for teams and communities (Bandura, 1997, p. 477, as cited in Arıkan and Çalışkan, 2013). Collective efficacy has been defined by Bandura as "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainment" (1997, p. 477). Zaccaro, Blair,

Peterson, and Zazanis define it as “shared competence among individuals when allocating, coordinating, and integrating their resources in a successful concerted response to specific situational demands” (1995, p. 309). Collective efficacy is not only the sum of the efficacy beliefs of the individual members but also the interactive dynamics of the group members (Goddard, Hoy, & Woolfolk-Hoy, 2000).

Relationship Between Collective Efficacy and Organizational Commitment

According to Doğan (2013), hierarchy of needs and social exchange theories can be used to explain the relationship between collective efficacy and organizational commitment. In this relationship, the reason for using two different theories is that there are three dimensions of organizational commitment—that is, *affective commitment*, *continuance commitment*, and *normative commitment*—and each of these dimensions is based on different reasons. Thus, continuance and affective commitment will be explained by hierarchy of needs and normative commitment by social exchange theory.

The relationship between collective efficacy and continuance commitment through the hierarchy of needs. The continuance commitment derives from employees’ desire to remain in the organization due to the personal investments they make in the organization. These investments include close social relations with colleagues, retirement rights, seniority, career, and special abilities obtained by working in the organization for a long time. In addition, uncertainties about getting better job opportunities elsewhere contribute to this decision. In summary, employees’ interests require continuance commitment to the organization. When we look at the relationship between collective efficacy and continuance commitment based on the hierarchy of needs, it is an inevitable fact that individuals have to work to meet their needs in the first two stages. Therefore, it is natural for individuals who have to work to demonstrate their continuance commitment to organizations. Many employees continue to work to meet the basic needs of themselves and their families, although they do not like their jobs. Therefore, when we look at the effect of self efficacy on this relationship, the characteristics of individuals with a high level of collective efficacy, such as struggling with difficulties, perseverance, persistence, and not being intimidated, will affect their commitment to their organizations positively. Individuals with high levels of collective efficacy will overcome the difficulties they face through their perceptions of efficacy, will not give up, will persevere, and will continue their commitment to the organization. In summary, the professional’s perception of qualification will increase their continuance commitment.

Hierarchy of needs theory in relationship between collective efficacy and affective commitment. Affective commitment emerges from a compromise between individual and organizational values that emotionally connects individuals to the organization and ensures them to be members of the organization. This type of commitment will correspond to the third stage of the hierarchy of needs (love, belonging, etc.). Individuals will be emotionally connected to a group, an organization, to meet their needs in the third stage. In this commitment, individuals with high perception of collective efficacy are expected to have a high commitment to the organization. Considering the characteristics (persistence, not being intimidated, determination, etc.) that the perception entails, the perception of collective efficacy will have a positive effect on these individuals’ affective commitment to organizations.

Social exchange theory in the relationship between collective efficacy and normative commitment. Normative commitment emphasizes the tendency to be committed and loyal to organizations in a culture that promotes commitment and loyalty to the organization. In addition, normative commitment includes beliefs that are consistent with organizational mission, goal, policy, and mode of action and internalized by individuals. In this commitment there is a harmony between individual and organizational values. The reason why employees exhibit this kind of commitment is that they believe that it is true and ethical. In summary, this kind of commitment is revealed with moral reasons. Individuals with high levels of self-efficacy are more likely to choose difficult and realistic goals for themselves and show more commitment to these goals. Considering this, individuals with characteristics such as perseverance and determination are not expected to leave their organizations easily. Thus, it is expected that the perception of collective efficacy will affect all types of commitment to the organization positively by considering the relationship between collective efficacy and the commitment to the organization, taking into consideration both the theories mentioned above and the results of various studies (as cited in Kırıştı, 2017). In a study conducted with 26,257 teachers and 6,711 managers, Ware and Kitsantas (2007) stated that collective efficacy significantly affected commitment to organization. Caprara, Barbaranelli, Steca, and Malone (2006) and Jex and Bliese (1999) argued that collective efficacy had a mediating effect on organizational commitment.

Relationship Between Burnout and Organizational Commitment

Burnout and organizational commitment are two concepts that affect each other, and they have a strong relationship. While burnout is an employee's attitude towards his or her job, organizational commitment is related to the employee's attitude towards the organization (Randall, 1987, p. 465). When employees face burnout, they react in two ways: leaving work or being uninterested in their work. One of the most important objectives of the business is to improve the skills and talents of the employees and to increase their commitment to the organization. Employees with high organizational commitment have a better performance, better relationship with other members, and higher satisfaction levels (Obeng and Ugboro, 2003, p. 83–98). Organizational commitment makes it easier for employees to stay in an organization. Commitment, which affects employees' intention to leave the organization, may increase the efficiency and effectiveness of the enterprise because of the decrease in the employee turnover rate (Saridede, 2004, p. 49). It is suggested that employees with a high level of commitment are more productive, contribute more to innovation and creativity, and have more loyalty and responsibility (Gürbüz, 2008, p. 65). Individuals with a high perception level of collective efficacy believe in the group, help each other, overcome difficulties by acting together, and support each other in a positive way. Thanks to these positive supports and cooperation, the commitment of individuals to the organization will be affected. In addition to this, as is the case with individual efficacy, an increase in productivity and performance along with the increase in the perception of collective efficacy cause employees to consider themselves as more valuable, and thus this increases their level of commitment to the organization (Meyer, Stanley, Herscovitch, and Topolnytsky, 2002).

These concepts are in mutual interaction, and teachers' perception of collective efficacy has a sensitive role in the relationship between organizational commitment and perceptions of professional burnout. When the conditions including the following elements are met in the school culture, it is seen that the teachers' professional burnout decreases and their motivation to work is affected positively (WestEd, 2000):

- 1- When teachers and other stakeholders of the organization model strong cooperation
- 2- When school principals and other members of the school community (stakeholders) appreciate the performance of the teachers, both individually and together
- 3- When teachers are encouraged to teach, learn, and to have commitment to a healthy organizational culture
- 4- When teachers are provided with the opportunity to develop expertise in teaching strategies and the use of technology to improve themselves and provide support for other basic elements in education

Collective efficacy may affect attitudes towards work in various ways. Bandura (2000) claims that groups with high levels of collective efficacy are more likely to overcome obstacles when they encounter obstacles and do not give up quickly. When Mulvey and Klein (1998) examined the effect of perceived negligence and collective efficacy on groups' performance and achieving goals, they found that groups with high levels of efficacy made more efforts compared to the groups with low levels of efficacy when faced with negative feedback. They also demonstrated that there was a positive correlation between collective efficacy and the group's commitment to the purpose. Gürçay, Yılmaz and Ekici (2009) gathered data from 122 teachers to determine teachers' levels of collective efficacy beliefs, teacher self-efficacy, self-regulation, and professional burnout, as well as their gender and occupational experience. The study revealed that teachers' collective efficacy belief levels were high. It was found that teacher self-efficacy and emotional exhaustion subscale contributed to predicting collective efficacy beliefs and that the whole model explained 34% of the variance. Zellar, Hochwarter, Perrewé, Miles and Kiewitz (2001), in their study on 188 nurses, found that collective efficacy correlated with lower intention to quit and higher job satisfaction. Various studies show that both self-efficacy and collective efficacy beliefs are related to significant organizational outcomes, and there is a positive correlation between collective efficacy and motivation, performance, job satisfaction, and organizational commitment (Dammacco, Dello Russo, & Borgogni, 2007; Borgogni, Petitta and Mastrorilli, 2010; Borgogni, Russo and Falcone, 2007; Chen and Bliese, 2002).

Kırmav (2010), in his master's thesis study, tried to determine the relationship between burnout and individual and collective efficacy of the teachers (123) who teach English at university. Data analysis showed that emotional exhaustion was experienced more frequently than depersonalization and that reduced personal accomplishment was the most common feeling. In addition, the analysis of perceptions of teacher efficacy showed that perceptions of individual teaching efficacy were stronger than perceptions of general teaching efficacy. On the other hand, it was seen that participants' perception of collective teacher efficacy was weaker than perception of individual teaching efficacy but stronger than perception of general teaching efficacy. It was once again seen that factors related to work, working environment, and managerial issues are among the most important sources of collective efficacy beliefs among the participants. The study also pointed out that there was a positive correlation between individual and collective teacher efficacy. In addition, collective teacher efficacy correlated positively with reduced personal accomplishment and negatively with depersonalization and emotional exhaustion.

In a study by Walumbwa, Wang, Lawler, and Kan (2004) of 402 people working in the banking and finance sector in China and India, the researchers found that transformational leadership has both direct and indirect implications on attitudes towards work such as job satisfaction and affective organizational commitment through collective efficacy. The process of thinking and reflecting on what the best methods to cope with problems and difficulties

could be will increase individual and collective trust in order to take initiative or do things in an unorthodox way. Moreover, transformational leaders can influence the collective efficacy by enabling the followers to become aware of the value and sacrifice that other group members add to the group (Walumbwa, Wang, and Lawler, 2003). Skaalvik and Skaalvik (2007) state that teachers' self-efficacy is related to their perceptions of collective efficacy and burnout levels. In other words, the researchers found that there was a significant positive correlation between collective self-efficacy and teacher self-efficacy and a significant negative correlation between teacher self-efficacy and burnout. Therefore, it can be expected that there will be a relationship between belief in promoting motivated learning and collective efficacy and burnout. Klassen, Usher, and Bong (2010) investigated the relationship between teachers' perceptions of collective efficacy and job satisfaction in Canada, the United States, and Korea. They argued that there was a positive correlation between teachers' perception of collective efficacy and job satisfaction in all three cultures. In the light of the previous research, it could be expected that teachers' perceptions of collective efficacy will positively correlate with belief in promoting motivated learning self-efficacy and negatively correlate with burnout levels (Klassen et al., 2010; Skaalvik and Skaalvik, 2007).

Consequently, teachers must fulfill both individual and collective efficacy elements in order to overcome the difficulties of school and education system, to fulfill their responsibilities and to carry out this process effectively. In this context, teachers need to turn to a school concept that supports each other, and follows and governs itself on the basis of the school's educational programs and culture in more cooperative way (Berliner, 2001; Keller-Schneider, 2014). According to Keller-Schneider (2014), teachers who work in collaboration with their colleagues and try to develop a healthy school culture are preferred in their schools. Teachers fulfilling the requirements of the school culture and developing a healthy cooperation while carrying out their current tasks will affect the affective characteristics of their work positively. In this respect, it can be argued that teachers' collective work and self-regulation skills positively correlate with motivation processes, but negatively correlate with burnout levels.

Method

This study used the correlational research design. Correlational research is a research method aiming to examine the relationships between two or more variables without any manipulation to affect them. Based on the relationships obtained with this research method, there is an opportunity to predict some results. In this research design, rather than cause-effect relationship, the variation of variables is discussed. The results obtained in the correlational research method give an idea about cause-effect relationship (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, and Demirel, 2008). In this research, relationships between burnout, perceptions of collective self-efficacy, and teachers' organizational commitment were investigated and analysed using correlational research design.

Target Population

The target population consisted of 377 teachers working at different levels of education in central districts of Konya. Of the teachers, 51.7% (n = 195) were female and 48.3% (n = 182) were male; 6.1% (n = 23) were at pre-education, 29.4% (n = 111) were at primary school, 37.1% (n = 140) at secondary school and 27.3% (n = 103) were at high school. The percentage of teachers with a bachelor's degree is 75.3% (n = 284) and with a master's degree or higher, 24.7% (n = 93). The mean age of teachers was 39.25 (SD = 8.25) and the

mean of seniority (year) was calculated as 15.32 (SD = 8.17). Teachers were informed about the nature of the study, that participation was voluntary.

Scales and Questionnaires

Demographic Information Form: For the purpose of this study, a personal information form was developed and used to obtain information about the demographic characteristics of the teachers who participated in the study. Demographic information form included items regarding gender, level of education, seniority, age, and marital status.

Collective Teacher Self-Efficacy Scale: The scale was developed by Tschannen-Moran and Barr (2004) and adapted to Turkish by Erdoğan and Dönmez (2015). The scale, which consists of 12 items, assesses collective teacher efficacy in two sub-dimensions. There are six items in the dimension of student discipline and six items in the dimension of teaching strategies. The 5-point Likert-type scale is scored as: no (1), less (2), medium (3), too (4) and completely (5). The high scores obtained from the scale indicate that the perception of collective teacher efficacy is high. In this study, Cronbach's alpha internal consistency coefficients calculated for student discipline and teaching strategies were found as 0.89 and 0.86, respectively.

Organizational commitment: The scale was developed by Allen and Mayer (1997). The validity and reliability of the Turkish version of the scale was performed by Erdoğan (2006). This scale consisted of 18 items measuring affective commitment, continuance commitment, and normative commitment. The 5-point Likert-type scale is scored as: I totally disagree (1), I disagree (2), I am undecided (3), I agree (4) and I totally agree (5). The scale is composed of three dimensions. There are six items in each dimension. In the scale, four items are reverse-coded: the third, fourth, fifth and thirteenth items. High scores on affective commitment, continuance commitment, and normative commitment suggest a high degree of organizational commitment. For this study, it was found that Cronbach's alpha values for affective commitment, continuance commitment, and normative commitment were 0.76, 0.72 and 0.76 respectively.

Maslach Burnout Inventory: This inventory was developed by Maslach et al. (1986) and adapted to Turkish by Ergin (1992). The scale, which consists of 22 items, evaluates burnout in three sub-dimensions. The first dimension, emotional exhaustion, consists of nine items; the second dimension, depersonalization, consists of five items; and the third dimension, reduced personal achievement, consists of eight items. The items in personal achievement subdimension are reverse-coded. The 5-point Likert-type inventory included five items to be answered as: never (1), very rare (2), sometimes (3), often (4) always (5). High scores obtained from scale show that perceived burnout is high. In this study, Cronbach's alpha internal consistency coefficients calculated for emotional exhaustion, depersonalization, and reduced personal achievement were found as 0.85, 0.77, and 0.72, respectively.

Data Analysis

For the purpose of this study, we performed a structural equation model analysis to test the mediating effect of collective efficacy in the relationship between professional burnout and organizational commitment. Before carrying out this analysis, we checked the assumptions required for multivariate analysis. We made the necessary assumptions on the total points obtained from the scales. Firstly, we investigated the presence of outliers that violate the normal distribution in the data set by creating box graphs. According to the results, there is no

outlier value which violates the normal distribution. According to Finney and DiStefano (2006), a univariate kurtosis of less than 7 and a skewness of less than 2 demonstrate sufficient normality. The skewness and kurtosis values of the four-variable ranged from -0.303 to 0.753 and -0.677 to 0.113 , respectively, which indicated that the data were of normal distribution. Mardia kurtosis coefficient of less than 8 shows that the assumption of multivariate normal distribution is met (Yılmaz and Varol, 2015). Mardia kurtosis coefficient calculated by AMOS was 6.37. This value showed that the assumption of multivariate normal distribution was met. In the next step, we examined the hypothesis for multivariate linear. Therefore, we formed a scatter diagram and examined for the variables. We observed that linear relationships between the variables existed.

Finally, we investigated variance inflation factors (VIF) and tolerance values (TV) to determine whether there are multicollinearity problems between dependent and independent variables. The fact that the variance inflation factors were equal to or greater than 10 and the tolerance values were equal to or less than 0.10 showed the existence of multicollinearity (Çokluk, Şekercioğlu, and Büyüköztürk, 2010). The VIF values were between 1.34 and 6.26, and the TV values were between 0.16 and 0.87. These values showed that there was no multicollinearity problem between the variables. As a result, it is understood that the data used in the study meet the assumptions required for multivariate analysis. Assumptions were made using SPSS 24.0. AMOS 24.0 was used for structural equation modelling analysis. In the analysis of the structural equation model, to test direct effects we tried to determine whether t-values are significant at the 0.05 level, and to test indirect effects, we took into consideration confidence intervals calculated by the bootstrap method. In the bootstrap method, data sets in different amounts and sizes are generated by resampling the observations in the data set. Using this method, a 2000 bootstrap sample was generated from the data set. In order for the indirect effect to be statistically significant, the estimated confidence intervals for the indirect effect should not contain 0. Indirect effects are considered statistically insignificant when the estimated confidence intervals contain 0 (Shrout & Bolger, 2002).

Discussion of the Findings

To test the mediating effect of collective efficacy in the relationship between professional burnout and organizational commitment, we used the method proposed by Baron and Kenny (1986). Baron and Kenny stated that three conditions need be met in order to establish mediation. First, the presumed independent variable (burnout) accounts for variation in the presumed mediator (collective teacher efficacy). Second, the independent variable (burnout) has a significant effect on the dependent variable (organizational commitment). Third, when the mediator is included in the regression analysis in the second step, the effect of the independent variable on the dependent variable is reduced and the mediator has a significant effect on the dependent variable. Therefore, we created and tested three different structural equation models. The structural equation model developed for the first condition is shown in Figure 1. In the model, burnout is an independent variable and collective teacher efficacy is the dependent variable. The values obtained by testing the model ($\chi^2/df = 2.01$; $p = 0.13$; RMSEA = 0.05; SRMR = 0.03; CFI = 0.99; TLI = 0.98; GFI = 0.99; AGFI = 0.97) indicated that the model corroborates the previous research data (Bollen, 1989; Browne and Cudeck, 1993; Hu and Bentler, 1999; Tanaka and Huba, 1985).

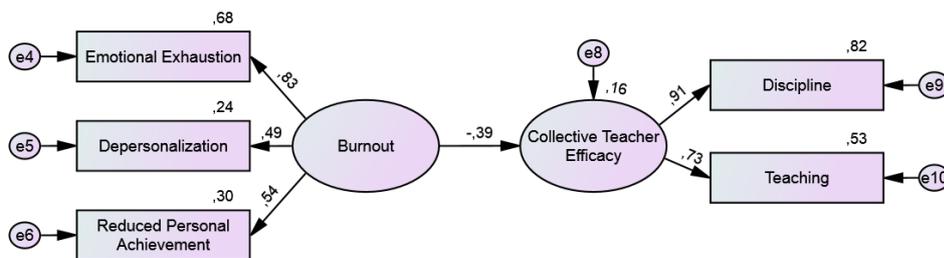


Figure 1. Structural Equation Model Developed to Determine the Effect of Burnout on Collective Teacher Efficacy

According to Figure 1, we see that burnout affects collective teacher efficacy negatively ($\beta = -0.39$; $p < 0.001$). Burnout accounts for 16% of the change in collective teacher efficacy. Therefore, the first condition that Baron and Kenny (1986) specified was met.

The structural equation model developed to test the second condition is given in Figure 2. In the model, burnout is the independent variable and organizational commitment is the dependent variable. The values obtained by testing the model ($\chi^2/df = 2.65$; $p = 0.01$; RMSEA = 0.07; SRMR = 0.04; CFI = 0.95; TLI = 0.95; GFI = 0.98; AGFI = 0.95) indicated that the model was in good agreement with the available data (Bollen, 1989; Browne and Cudeck, 1993; Hu and Bentler, 1999; Tanaka and Huba, 1985).

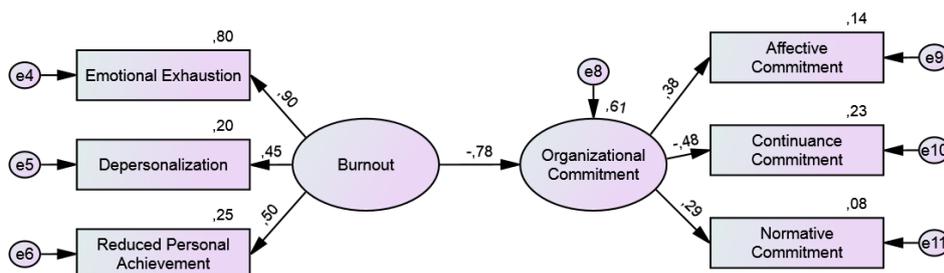


Figure 2. Structural Equation Model Developed to Determine the Effect of Burnout on Organizational Commitment

According to Figure 2, burnout affects organizational commitment negatively ($\beta = -0.78$; $p < 0.001$). Burnout accounts for about 61% of the change in organizational commitment. Therefore, the second condition that Baron and Kenny (1986) specified was met.

The structural equation model developed to test the third condition is given in Figure 3. In the model, burnout is an independent variable, organizational commitment is the dependent variable, and collective teacher efficacy is the mediator variable. The values obtained by testing the model ($\chi^2/df = 1.70$; $p = 0.04$; RMSEA = 0.04; SRMR = 0.04; CFI = 0.98; TLI = 0.96; GFI = 0.98; AGFI = 0.96) indicated that the model was in good agreement with the available data (Bollen, 1989; Browne and Cudeck, 1993; Hu and Bentler, 1999; Tanaka and Huba, 1985).

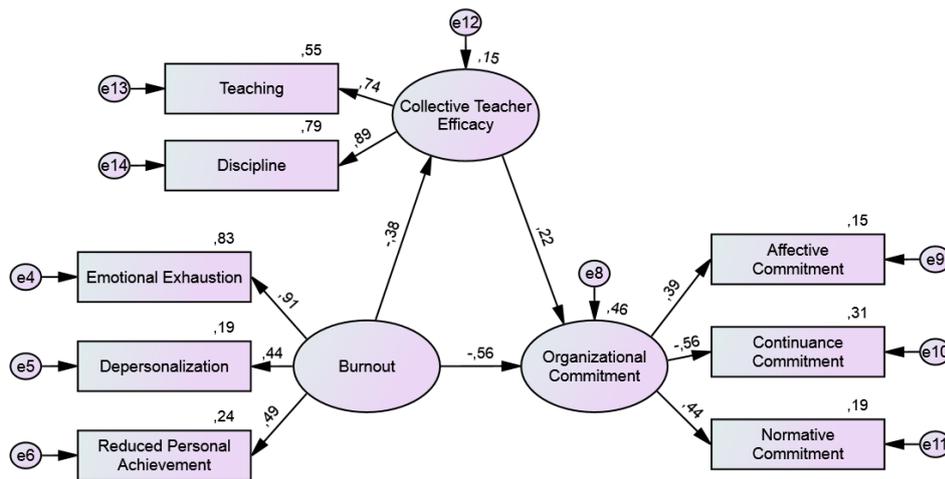


Figure 3. Structural Equation Model Developed to Test the Mediating Effect of Collective Teacher Efficacy in the Relationship Between Burnout and Organizational Commitment

According to Figure 3, burnout has a negative effect on organizational commitment ($\beta = -0.56$; $p < 0.001$) and collective teacher efficacy ($\beta = -0.38$; $p < 0.001$). Collective teacher efficacy affects organizational commitment positively ($\beta = 0.22$; $p < 0.05$). Burnout and collective teacher efficacy explain about 46% of the change in organizational commitment.

Table 1. Coefficients of Relations between Variables in Mediation Model

| Mediation Model | | | | Direct Effect (Without mediator) | Direct Effect (With mediator) | Indirect Effect | |
|-----------------|-----|-----------------------------|-----|-------------------------------------|----------------------------------|-----------------|--------|
| Burnout | --- | Collective teacher efficacy | --- | Organizational commitment | -0.78*** | -0.56*** | -0.22* |

*** $p < 0.001$; * $p < 0.05$

According to the table, burnout has a significant negative effect on organizational commitment without the mediator variable ($\beta = -0.78$; $p < 0.001$). When the mediator variable was added to the model, the effect of burnout on organizational commitment was slightly reduced ($\beta = -0.56$; $p < 0.001$). Part of the effect of burnout on organizational commitment has begun to take place due to collective teacher efficacy ($\beta = -0.22$; $p < 0.05$). Therefore, the third condition that Baron and Kenny (1986) specified was met. The decrease in the direct effect of burnout on organizational commitment and the fact that this effect remained statistically significant showed that collective teacher efficacy is partly the mediator in the relationship between burnout and organizational commitment.

Significance of the Study and Conclusions

In this study, we investigated the factors that affect the relationship between teachers' perceptions of burnout and their organizational commitment. We tested whether the perception of collective efficacy has a mediating role in this relationship. We chose collective efficacy because it is an important issue for teachers.

This study is an applied research on teachers working in preschool, primary and high-school levels in the city center of Konya. In this study, we examined the relationship between teachers' professional burnout and their organizational commitment and the mediating role of the perceptions of collective efficacy in this relationship. We tested the relationships between the variables discussed in this study by the structural equation model analysis. As a result, we found that teachers' perceptions of professional burnout had a significant effect on organizational commitment and perceptions of collective efficacy. In addition, we determined that teachers' perceptions of collective efficacy were the partial mediator in the relationship between their perceptions of professional burnout and organizational commitment.

One of the findings obtained from the study is that teachers' perceptions of professional burnout affect their organizational commitment negatively. As teachers' perception of professional burnout increases, their organizational commitment decreases. This result is consistent with the results in the literature (Çetin, Basım, and Aydoğan, 2011; Maryama, Zawawi, Hitam and Jody, 2011; Polat, 2009). Professional burnout consists of emotional exhaustion, depersonalization, and reduced personal achievement (Maslach and Jackson, 1981). Exposure to excessive demands that may adversely affect the psychology and emotional reactions of an individual in his or her professional life may exhaust his or her energy (Budak and Sürgevil, 2005). Individuals with a high perception of professional burnout tend to exhibit insensitive behaviours that lack emotion towards individuals they serve, and they do not take others' individual needs into account. At the same time, these individuals feel incompetent and unsuccessful. These individuals often have a negative assessment of the self (Yıldırım and İçeri, 2010). Therefore, it can be argued that it is very difficult for individuals with high perception of professional burnout to develop a healthy sense of organizational commitment. The negative mood of these individuals may prevent them from accepting organizational values strongly and remaining as an important part of the organization.

Another finding of the study is that the teachers' perceptions of professional burnout affect their perceptions of collective efficacy negatively. As teachers' perceptions of professional burnout increase, their perceptions of collective efficacy decrease. Studies investigating the relationship between teachers' perceptions of professional burnout and perceptions of general efficacy support this result (Brouwers, Evers, and Tomic, 2001; Çimen, 2007; Karahan, 2008; Mede, 2009; Telef, 2011). The state of fatigue, frustration and emotional exhaustion create a sense of professional burnout. The sense of professional burnout can lead to a decrease in the performance of the employees and decrease in job satisfaction (Altay, 2009; Mengenci, 2015). This situation may cause teachers to make a limited contribution to the students' ability to gain life-oriented functional skills, have a deep understanding of the contents of the lesson, and develop of high-level skills such as creativity and critical thinking. As a result, it is clear that teachers' high-level perceptions of professional burnout will affect their perceptions of collective efficacy negatively.

In this study, in the light of theoretical explanations, it was hypothesized the effect of collective teacher efficacy had a mediating role on the relationship between burnout and organizational commitment. The findings showed that there was a direct relationship between burnout and organizational commitment, but when collective efficacy was included in this relationship, collective efficacy played a partial mediating role between burnout and organizational commitment. In other words, burnout has begun to affect organizational commitment indirectly through collective efficacy. The fact that the relationship between

burnout and organizational commitment was not completely eliminated by the inclusion of collective efficacy in the model revealed the existence of other mediator variables.

The employees' perception of burnout affects the feelings of organizational commitment directly (Erğın, 1992; Hakanen, Bakker and Schaufeli, 2006; Kervancı, 2013; Üresin, 2009). Individuals with high perceptions of burnout feel physically and emotionally exhausted (Cordes and Dougherty, 1993). The sense of burnout can cause individuals to be unable to concentrate enough for the interests of the organization, work for the shared purposes of the organization, and use their time efficiently. On the other hand, the findings of this study showed that burnout can affect organizational commitment directly, and can affect organizational commitment through teachers' perceptions of collective efficacy indirectly. In other words, burnout is influenced by teachers' perceptions of collective efficacy and the effects of burnout are indirectly reflected in organizational commitment through perceptions of collective efficacy. Therefore, it is very important for teachers to have sufficient perception of collective efficacy. Teachers with a high perception of collective efficacy are more in cooperation with their colleagues in teaching and discipline (Erdoğan and Dönmez, 2015; Kurt, 2012). This may reduce teachers' perceptions of burnout and increase their perceptions of organizational commitment. Increasing cooperation in discipline and teaching practices within the school, creating environments where teachers can share their experiences, and strengthening communication among employees can increase their perception of collective efficacy.

This study has some limitations. The fact that the study group is composed of teachers working in the schools located in the city center of Konya and that the number of primary and secondary school teachers is higher than the preschool and high school teachers limits the generalisability of the results to broader population of teachers in the country. It will be useful to conduct similar research to cover teachers from different provinces and districts. Further research can be conducted by considering different variables that can mediate the relationship between teachers' perceptions professional burnout and organizational commitment. We recommended investigating the relationships between teachers' organizational commitment, professional burnout, and collective efficacy by considering their areas.

Dr. Mevlut Aydogmus, PhD, is an assistant professor for curriculum and instruction department of Ahmet Kelesogllu Education Faculty of Necmettin Erbakan University in Konya, Turkey. Her field of research is pedagogical practice and curriculum development.

Dr. Yalçın Tükel studied at the Selcuk University Faculty of Sport Sciences between 1996 and 2000. He finished his master's degree in the field of trainer education and his PhD in the field of sport management. He has been interested in judo for 20 years and has many national degrees and has the fourth stage (chief coach) certificate and has fourth dan. Between 1998 and 2000, he was a trainer in the Turkish judo national team. Moreover, he is interested in table tennis, badminton, and athletics. He has been working as a physical education teacher at the Ministry of Labour, Social Services, and Family in Konya, Turkey since 2003. He is currently working as provincial coordinator of Child Rights. He has two children.

References

- Akar, H. (2014). Okul Yöneticilerinin Örgütsel Bağlılıklarının İncelenmesi. *Sosyal Bilimler Dergisi*, 4(8), 110–132.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18.
- Altay, H. (2009). Antakya Ve İskenderun Otel Çalışanlarının Tükenmişliği Ve İş Tatmini Zerine Bir Araştırma. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 6(12), 1–17.
- Arıkan, S., & Çalışkan Sezer, C. (2013). “Kolektif Yeterlik” Üzerine Yeni Bağımsız Değişken Arayışları: Lider-Üye Etkileşimi’nin Kolektif Yeterlik Üzerindeki Etkisi Üzerine Bir Araştırma, *Türk Psikoloji Dergisi*, 28(71), 1–16.
- Bakan, İ. (2011). *Örgütsel Stratejilerin Temeli Örgütsel Bağlılık Kavram, Kuram, Sebep ve Sonuçlar*. Ankara, Turkey: Gazi Kitabevi.
- Bakır, A. A. (2013). *Öğretmenlerin Paylaşılan Liderlik ve Örgütsel Bağlılık Algıları Arasındaki İlişkinin Analizi*. Doktora Tezi, İnönü Üniversitesi Eğitim Bilimleri Enstitüsü, Malatya.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, 9(3), 75–78.
- Baron, R. M., & Kenny, D. A. (1986). The moderator mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Berliner, D. C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, 35(5), 463–482.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17(3), 303–316.
- Borgogni L., Petitta L., & Mastroianni A. (2010). Correlates of collective efficacy in the Italian Air Force. *Applied Psychology*, 59(3), 515–537.
- Borgogni L., Russo S. D., & Falcone S., (2007). Collective efficacy and organizational commitment in an Italian city hall. *13th European Congress of Work and Organizational Psychology*.
- Brouwers, A., Evers, W. J. G., & Tomic, W. (2001). Self-efficacy in eliciting social support and burnout among secondary-school teachers. *Journal of Applied Social Psychology*, 31(7), 1474–1491.

- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sage Focus Editions*, 154, 136–136.
- Budak, G., & Sürgevil, O. (2005). Tükenmişlik ve tükenmişliği etkileyen örgütsel faktörlerin analizine ilişkin akademik personel üzerinde bir uygulama. *Dokuz Eylül Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 20(2), 95–108.
- Büyüköztürk, S., Kılıç Çakmak, E., Akgün, O. E., Karadeniz, S., & Demirel, F. (2008). *Bilimsel araştırma yöntemleri*. Ankara, Turkey: Pegem Akademi.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level, *Journal of School Psychology* 44(6), 473–490
- Cemaloğlu, N., & Şahin, D. E. (2007). Öğretmenlerin Mesleki Tükenmişlik Düzeylerinin Farklı Değişkenlere Göre İncelenmesi. *Kastamonu Eğitim Dergisi*, 15(2), 465–484.
- Çetin, F., Basım, H. N., & Aydoğan, O. (2011). Örgütsel bağlılığın tükenmişlik ile ilişkisi: öğretmenler üzerine bir araştırma. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 25, 61–70.
- Chen G., & Bliese P. D., (2002), The role of different levels of leadership in predicting self- and collective efficacy: Evidence for discontinuity. *Journal of Applied Psychology*, 87 (3), 549–556.
- Çimen, S. (2007). *İlköğretim Öğretmenlerinin Tükenmişlik Yaşantıları ve Yeterlik Algıları*. (Yayınlanmamış Yüksek Lisans Tezi). Kocaeli Üniversitesi, Kocaeli, Turkey.
- Çokluk, Ö., Şekercioğlu, G. & Büyüköztürk, Ş. (2010). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları*. Ankara, Turkey: Pegem Akademi.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *The Academy of Management Review*, 18(4), 621–656.
- Dammacco S., Dello Russo D., & Borgogni L., (2007). Collective efficacy and PoC: A case study in an Italian telecommunication firm. *13th European Congress of Work and Organizational Psychology*.
- Demirel, Y., Tohum, E. U., & Kartal, Ö. (2017). Tükenmişliğin Örgütsel Bağlılık Üzerine Etkisi: Bir Üniversite Hastanesinde Çalışan Hemşireler Üzerine Araştırma. *Kastamonu Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 18(1), 444–460.
- Dericioğulları, A., Konak, Ş., Arslan, E., & Öztürk, B. (2007). Öğretim elemanlarının tükenmişlik düzeyleri: Mehmet Akif Ersoy Üniversitesi örneği. *Fırat Sağlık Hizmetleri Dergisi*, 2(5), 13–23.
- Doğan, E. Ş. (2013). *Örgüt Kültürü ve Örgütsel Bağlılık*. İstanbul, Turkey: Türkmen Kitabevi.

- Eğriboyun, D. (2014). Ortaöğretim okullarında görev yapan yönetici ve öğretmenlerin örgütsel güven ve örgütsel bağlılıkları arasındaki ilişki. *Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(2), 329–363
- Erdoğan, U., & Dönmez, B. (2015). Kolektif öğretmen yeterliği ölçeğinin Türkçeye uyarlanması: Geçerlik ve güvenilirlik çalışması. *Kuram ve Uygulamada Eğitim Yönetimi*, 21(3), 345–366.
- Erdoğan, H. (2006). *Resmi-özel ilköğretim okullarında çalışan yöneticilerin kişisel özellikleri ile örgütsel bağlılıkları arasındaki ilişki*. (Yüksek Lisans Tezi). Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü, İstanbul, Turkey.
- Ergin, C. (1992). Doktor ve Hemşirelerde Tükenmişlik ve Maslach Tükenmişlik Envanterinin Uygulanması. 7.Ulusal Psikoloji Kongresi Bilimsel Çalışmaları El Kitabı, (143–154). Ankara, Turkey: Psikologlar Derneği Yayınları.
- Finney, S. J., & DiStefano, C. (2006). Non-normal and categorical data in structural equation modeling. In G. R. Hancock, & R. D. Mueller (Eds.), *Structural equation modeling: A second course* (pp. 269–314). Charlotte: Information Age.
- Goddard, R. D., Hoy, W. K., & Woolfolk-Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Education Research Journal*, 37(2), 479–507.
- Gören, T., & Yengin, P. S. (2014). İlköğretim Kurumlarında Görev Yapan Öğretmenlerin Örgütsel Bağlılık Düzeyleri; Aydın İli Örneği. *Eğitim Bilimleri Dergisi*, 40, 69–87.
- Güney, S. (2001). *Yönetim ve organizasyon*. Ankara, Turkey: Nobel Yayın Dağıtım.
- Gürbüz, Z. (2008). Kars İlinde görevli okul öncesi öğretmenlerinin iş tatmin düzeyleri ve mesleki tükenmişlik düzeylerinin incelenmesi. (Yayınlanmamış yüksek lisans tezi). Marmara Üniversitesi, İstanbul, Turkey.
- Gürçay, D., Yılmaz, M., & Ekici, G. (2009). Öğretmen kolektif yeterlik inancını yordayan faktörler. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 36(36), 119–128.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495–513.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- İhtiyaroğlu, N. (2018). Analysis of relationship between teachers' coping styles with stress and the level of organizational commitment, *International Online Journal of Educational Sciences*, 10(2), 192–206.
- İnce, M., & Gül, H. (2005). *Yönetimde Yeni Bir Paradigma. Örgütsel Bağlılık*. Konya, Turkey: Çizgi Yayıncılık

- Jex, S. M., & Bliese, P. D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressors: A multilevel study. *Journal of Applied Psychology, 84*(3), 349–361. [Http://Search.Proquest.Com/Docview/213941734?Accountid=16595](http://Search.Proquest.Com/Docview/213941734?Accountid=16595)
- Karahan, Ş. (2008). Özel Eğitim Okullarında Çalışan Eğitimcilerin Öz-yeterlik Algılarının ve Tükenmişlik Düzeylerinin İncelenmesi. (Yayınlanmamış Yüksek Lisans Tezi). Marmara Üniversitesi, İstanbul, Turkey.
- Keller-Schneider, M. (2014). Self-regulated learning in teacher education—the significance of individual resources and learning behaviour. *Australian Journal of Educational & Developmental Psychology, 14*, 144–158.
- Kervancı, F. (2013). Tükenmişlik Sendromunun örgütsel bağlılık ve işten ayrılma niyetine etkisini belirlemeye yönelik bir araştırma. (Yüksek Lisans Tezi). Niğde Üniversitesi, Sosyal Bilimler Enstitüsü, Niğde, Turkey.
- Kırmav A. U. (2010). An exploration of burnout and individual and collective teacher efficacy in a Turkish state university. (Unpublished masters' thesis). Bilkent University, The Graduate School of Education, Ankara, Turkey.
- Kırıştı, B. (2017). Öğretmenlerin Kolektif Yeterlilik Algıları İle Örgütsel Bağlılık Algıları Arasındaki İlişkinin İncelenmesi. (Yayınlanmış Yüksek Lisans Tezi). Yeditepe Üniversitesi, İstanbul, Turkey.
- Klassen, R. M., Usher, E. L., & Bong, M. (2010). Teachers' collective efficacy, job satisfaction, and job stress in cross-cultural context. *The Journal of Experimental Education, 78*(4), 464–486. doi:10.1080/00220970903292975
- Koç, H. (2009). Örgütsel Bağlılık ve Sadakat İlişkisi. *Elektronik Sosyal Bilimler Dergisi, 8*(28), 200–211.
- Kurt, T. (2012). Öğretmenlerin öz yeterlik ve kolektif yeterlik algıları. *Journal of Turkish Educational Sciences, 10*(2), 195–227.
- Maryama, N. H. B., Zawawi, N., Hitam, M., & Jody, J. M. (2011). Organizational commitment and job burnout among employees in Malaysia. In the proceedings of the International Conference on Business and Economics Research (Vol. 1, pp. 185–187).
- Maslach, C., & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied and Preventive Psychology, 7*, 63–74.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior, 2*(2), 99–113.
- Maslach, C., Jackson, S. E., Leiter, M. P., Schaufeli, W. B., & Schwab, R. L. (1986). Maslach burnout inventory (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.

- Mede, E. (2009). An analysis of relations among personal variables, perceived self-efficacy and social support on burnout among Turkish EFL teachers. *Inonu University Journal of The Faculty of Education*, 10(2), 39–52.
- Mengenci, C. (2015). İş Tatmini, Duygusal Emek ve Tükenmişlik İlişkilerinin Belirlenmesi. *Ege Academic Review*, 15(1), 127–139.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 61(1), 20–52.
- Mulvey P. W., & Klein H. J., (1998). The impact of perceived loafing and collective efficacy on group goal process and group performance. *Organizational Behavior and Human Decision Processes*, 74(1), 62–87.
- Nayır, F. (2013). İlköğretim Okulu Yöneticilerinin Örgütsel Bağlılık Düzeyi. *İlköğretim Online*, 12(1), 179–189.
- Obeng, K., & Ugboro, I. (2003). Organizational Commitment Among Public Transit Employees: An Assessment Study. *Journal of The Transportation Research Forum*, 57(2), 83–98.
- Özgan, H., Yiğit, C., & Cinoğlu, M. (2011). İlköğretim Okulu Öğretmenlerinin Örgütsel Bağlılık Düzeylerinin İncelenmesi. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi*, 8(1), 1–14.
- Özkaya, H. (2006). Yatılı ilköğretim Bölge Okulu ve İlköğretim Okullarında Görev yapan Öğretmenlerin Tükenmişlik Düzeylerinin Öğretmen Görüşleri açısından Karşılaştırılması. (Unpublished master's thesis). Onsekiz Mart Üniversitesi, Çanakkale, Turkey.
- Polat, S. (2009). İlköğretim müfettişlerinin örgütsel bağlılık, mesleki tükenmişlik ve işten ayrılma niyetleri arasındaki ilişki. *Education Sciences*, 4(3), 1150–1159.
- Randall, M. (1987). Threatened with deportation. *Latin American Perspectives*, 14(4), 465–479.
- Sarıdere, U. (2004). Eğitimde örgütlerinde örgütsel bağlılığın işten ayrılma niyetine etkisi. (Yayınlanmış Yüksek Lisans Tezi). Kocaeli Üniversitesi, Sosyal Bilimler Enstitüsü, Kocaeli, Turkey.
- Sezgin, F. (2010). Öğretmenlerin Örgütsel Bağlılığının Bir Yordayıcısı Olarak Okulun Örgüt Kültürü. *Eğitim ve Bilim*, 35(156), 142–159.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422–445.
- Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout.

Journal of Educational Psychology, 99(3), 611–625. doi:10.1037/0022-0663.99.3.611

- Tanaka, J. S., & Huba, G. J. (1985). A fit index for covariance structure models under arbitrary GLS estimation. *British Journal of Mathematical and Statistical Psychology*, 38(2), 197–201.
- Telef, B. B. (2011). The study of teachers' self-efficacy, job satisfaction, life satisfaction and burnout. *Elementary Education Online*, 10(1), 91–108.
- Togia, A., Koustelios, A., & Tsigilis, N. (2004). Job satisfaction among Greek academic librarians. *Library & Information Science Research*, 26(3), 373–383.
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and Policy in Schools*, 3(3), 189–209.
- Uğraşoğlu, İ. K., & Çağanağa, Ç. K. (2017). Öğretmenlerin Örgüte Bağlılık Düzeylerinin Farklı Değişkenler Açısından İncelenmesi. *International Journal of New Trends in Arts, Sports & Science Education*, 6(4), 10–38.
- Üresin, T. (2009). Tükenmişlik ve örgütsel bağlılık arasındaki ilişki. (Yüksek Lisans Tezi). Marmara Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul, Turkey.
- Üstüner, M. (2009). Öğretmenler için Örgütsel Bağlılık Ölçeği: Geçerlik ve güvenilirlik çalışması. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 10(1), 1–17.
- Walumbwa, F. O., Wang P., Lawler J. J., & Kan, S. (2004). Exploring new frontiers: The role of collective efficacy in the relations between transformational leadership and work outcomes. *Organizational Behavior and Organizational Theory*, 77(4), 515–530.
- Wang, Y. (2017). The effects of teaching satisfaction on teacher motivation in Islamic private schools in Pattani Province, Thailand. *International Journal of Secondary Education*, 5(3), 37–41.
- Ware, H., & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *Journal of Educational Research*, 100(5), 303–310.
- WestEd. (2000). *Teachers who learn, kids who achieve: A look at schools with model professional development*. Retrieved from WestEd website: https://www.wested.org/online_pubs/teachers_who_learn/TeachLearn.pdf
- Yıldırım, M. H., & İçerli, L. (2010). Tükenmişlik sendromu: Maslach ve Kopenhag tükenmişlik ölçeklerinin karşılaştırmalı analizi. *Organizasyon ve Yönetim Bilimleri Dergisi*, 2(1), 123–131.
- Yılmaz, V., & Varol, S. (2015). Hazır yazılımlar ile yapısal eşitlik modellemesi: AMOS, EQS, LISREL. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 44, 28–44.

Zaccaro, S. J. Blair, V. Peterson, C., & Zazanis, M. (1995). Collective efficacy. In J. E. Maddux (Ed.), *Self-Efficacy, adaptation, and adjustment: theory, research, and application* (pp. 305–328). New York, NY: Plenum.

Zellar K. L., Hochwarter W. A., Perrewe P. L., Miles A. K., & Kiewitz C. (2001). Beyond self-efficacy: Interactive effects of role conflict and perceived collective efficacy. *Journal of Managerial Issues*, 13(4), 483–499.